

Index to Current Science, Volume 64, January – June 1993

AUTHOR INDEX

Achaya, K. T. 693 (Historical notes)
Ahamed, R. Nazeer *see* Shaikh, Parveen D.
Amritphale, Dilip 187 (Research communication)
Anjaneyulu, K. S. R. *see* Chandrasekar, R. (391)
Arora, B. R. 848 (Article, Quaternary period in India special issue)
Arvind Kumar 691 (Book review)
Arvind Kumar *see* Bhargava, Shekhar
Ashford, Oliver M. 348 (Book review)
Athithan, G. *see* Ramesh, N.

Babu, A. M. *see* Indira, A.
Badam, G. L. *see* Rajaguru, S. N.
Bagati, T. N. 898 (Article, Quaternary period in India special issue)
Bajaj, M. M. *see* Giri, R.
Bajaj, Rahul 625 (Correspondence)
Bajpai, Sunil 42 (Research communication)
Bala Ravi, S. 306 (Review article)
Balaji, V. N. *see* Rao, Shashidhar, N.
Balasubramonian, G. *see* Thampi, P. K.
Bandyopadhyay, A. *see* Guin, S.
Banerjee, P. K. 921 (Article, Quaternary period in India special issue)
Basarkar, S. S. *see* Sreeharan, C. R. (632)
Baskaran, G. 216 (Commentary)
Bawa, Kamaljit S. 205 (Opinion)
Bellad, S. B. *see* Indira, A.
Bera, Rajendra K. 69 (Correspondence); 138 (News); 628 (Opinion)
Bhalla, O. P. *see* Kumar, R.
Bhargava, Shekhar 137 (Correspondence)
Bhatia, C. R. 267 (Personal news); 548 (Correspondence)
Bhattacharya, A. K. *see* Chatterjee, Aseema
Bhattacharya, S. *see* Guin, S.
Bhola, A. M. *see* Sareen, B. K.
Bir, S. S. 322 (Research communication)
Biswas, S. K. 797 (Article, Quaternary period in India special issue)
Boden, Margaret A. 419 (Article, Artificial intelligence special issue)
Bonner, J. T. 459 (General article)
Brookfield, M. E. 903 (Article, Quaternary period in India special issue)
Burma, D. P. 203 (Correspondence)
Butchaiah, G. *see* Prabhudas, K.

Chadha, R. K. *see* Rastogi, B. K.
Chamyal, L. S. *see* Merh, S. S.

Chandra, Amita 755 (Research communication)
Chandra, P. R. *see* Shrivastava, P. C.
Chandra, Suresh *see* Chandra, Amita
Chandrasekar, R. 391 (Article, Artificial intelligence special issue); 434 (Book review); 436 (Video review)
Chandrasekaran, B. 366 (Article, Artificial intelligence special issue)
Chandrasekhara, M. R. 269 (Book review)
Chandrashekaran, M. K. 22 (Commentary)
Chatterjee, Aseema 757 (Research communication)
Chaudhari, A. N. *see* Mohatkar, L. C.
Cheema, Paramjeet *see* Bir, S. S.
Cherian, Ligi *see* Somayajulu, V. V.
Chidambaram, R. 508 (Article, Special section)
Choudhury, A. *see* Kundu, Satyam Kumar
Chubachi, Shigeru (Article, Ozone special section)

Damodaran, A. D. 203 (Correspondence)
Daniels, R. J. Ranjit 706 (Opinion)
Deokar, A. B. *see* Mohatkar, L. C.
Devaraju, T. C. 919 (Article, Quaternary period in India special issue)
Dharmalingam, K. *see* Palanivelu, P.
Dhaulakhandi, A. B. 39 (Research communication)
Dhuldhoya, N. M. 475 (Article, Special section)

Eapen, J. T. *see* Valiathan, M. S.

Farooqui, Parveen 161 (News)

Gadagkar, Raghavendra 215 (Research news); *see* Venkataraman, Arun B.
Gadgil, Madhav *see* Joshi, N. V.
Geetha, A. 318 (Research communication)
Geetha, D. 280 (Scientific correspondence)
George, Arji I. *see* George, M. Thomas
George, M. Thomas 221 (General article)
Ghaswala, P. S. 769 (Book review)
Ghosh, R. N. *see* Vaidyanadhan, R.
Giri, R. 329 (Erratum)
Gogate, M. G. *see* Gore, A. P.
Gopalakrishnan, P. S. *see* Kannan, C. S.
Gore, A. P. 711 (General article)
Gowrishankar, J. 705 (Opinion)
Greenstein, George 121 (Historical notes)
Grover, Anil 226 (Review article)
Guin, S. 327 (Research communication)
Gulhane, P. M. *see* Sreedharan, C. R. (634)
Gupta, G. P. *see* Mohanty, M.

Gupta, Harsh K. 889 (Article, Quaternary Period in India special issue)

Gupta, S. K. 107 (Research communication)

Haldar, S. *see* Sarkar, Saumendra N.

Hande, M. Prakash 70 (News)

Husain, Sajid 681 (Research communication)

Indira, A. 247 (Research communication)

Jacob, T. M. 27 (Research news)

Jain, Arvind K. *see* Sorkhabi, Rasoul B.

Jain, H. K. 278 (Correspondence)

Jain, S. Mohan 715 (Review article)

Jana, N. R. *see* Guin, S.

Jayaraman, A. 666 (Review article)

Jha, R. 140 (Research news)

Johal, M. S. *see* Tandon, K. K.

Josephson, Susan G. *see* Chandrasekaran, B.

Joshi, Aravind K. 393 (Article, Artificial intelligence special issue)

Joshi, Ashok Kumar 146 (Scientific correspondence)

Joshi, A. P. 607 (Book review)

Joshi, M. C. *see* Dhaulakhandi, A. B.

Joshi, N. V. 10 (Article, Anthropology special section); *see* Gore, A. P.

Joshi, R. P. *see* Dhaulakhandi, A. B.

Joshi, Y. P. 454 (Opinion)

Kabiraj, Sasti Brata 545 (Correspondence)

Kalam, A. P. J. Abdul *see* Chidambaram, R.

Kalbag, S. S. 201 (Correspondence)

Kale, Vishwas S. *see* Rajaguru, S. N.

Kamble, Vinay 550 (News)

Kannan, T. S. 606 (Book review)

Karmarkar, B. M. 923 (Article, Quaternary period in India special issue)

Kartha, C. C. 598 (Research communication)

Kasbekar, D. P. 285 (Research news)

Kasture, S. V. 673 (Research article)

Kasturi, M. *see* Shaikh, Parveen D.

Kataria, S. S. *see* Sreedharan, C. R. (634)

Kaushik, N. A. 102 (Research article)

Keshavamurty, R. N. *see* Kasture, S. V.

Khanadali, S. D. *see* Devaraju, T. C.

Kharshikar, A. V. *see* Gore, A. P.

Khatri, K. N. 885 (Article, Quaternary period in India special issue)

Khetmalas, M. B. *see* Lambhate, S. S.

Kochhar, R. K. 55 (Historical notes)

Kotlia, B. S. *see* Sahni, Ashok

Krishan, V. 301 (Review article)

Krishna, S. S. 330 (Book review)

Krishna Brahmam, N. 837 (Article, Quaternary period in India special issue)

Krishnamurthy, S. S. 268 (Personal news)

Kshirsagar, Anupama *see* Rajendran, P.

Kulkarni, S. R. *see* Karmarkar, B. M.

Kumar, N. 754 (Research communication)

Kumar, R. 709 (Scientific correspondence)

Kundu, Satyam Kumar 110 (Research communication)

Kuriyan, John 85 (Review article)

Kutty, V. Raman 333 (Book review)

Lakhina, G. S. 660 (Review article)

Lakhotia, S. C. 608 (Book review)

Lal, D. 612 (Personal news)

Lal, Nand *see* Mehta, Y. P.

Lamba, Vikram J. S. 149 (Scientific correspondence)

Lambhate, S. S. 50 (Research communication)

Leelanandam, C. 729 (Research article)

Legendre, Geraldine *see* Smolensky, Paul

Lewis, Edward B. 640 (General article)

Luthra, Usha *see* Husain, Sajid

Mahadevan, P. R. 655 (General article)

Mahadevan, S. *see* Wyatt, H. V.

Malhotra, K. C. *see* Reddy, B. M.

Mani, A. 335 (Article, Ozone special section)

Manickavasagam, R. M. *see* Sorkhabi, Rasoul, B.

Manivannan, B. *see* Shaikh, Parveen, D.

Marathe, S. S. *see* Karmarkar, B. M.

Mascarenhas, A. 684 (Research communication)

Mashelkar, R. A. 467 (Guest editorial); 490 (Article, Special section)

Mehta, S. K. *see* Vijayan, P. K.

Mehta, Y. P. 519 (Research communication)

Merh, S. S. 823 (Article, Quaternary period in India special issue)

Mishra, Rakesh, K. 212 (News)

Mitra, A. N. 162 (General article)

Miyata, Yoshiro *see* Smolensky, Paul

Mohan Ram, H. Y. 151 (General article)

Mohanty, M. 679 (Research communication)

Mohatkar, L. C. 604 (Research communication)

More, W. D. *see* Lambhate, S. S.

Mukunda, N. 566 (General article)

Muniappan, R. 555 (Commentary)

Muniyappa, V. 281 (Scientific correspondence)

Murthy, M. R. N. 769 (Book review)

Murthy, U. R. 315 (Article)

Muthukrishnan, J. 112 (Research communication)

Nadguda, Rajani S. 119 (Book review)

Nair, M. K. 279 (Scientific correspondence)

Nair, P. K. R. *see* Thampi, P. K.

Namboodiri, M. S. Aryan 234 (Review article)

Nandedkar, R. V. *see* Vadujkar, R. M.

Narasimha, D. 725 (Research article)

Narasimha, R. 28 (General article); 494 (Article, special section)

Narasimhan, R. 72 (Commentary); 358 (Introduction, Artificial intelligence special issue); 361 (Article *ibid*)

Narlikar, Jayant V. 551 (News)

Nigam, Rajiv 935 (Article, Quaternary period in India special issue)

Nishimura, Susumu *see* Sorkhabi, Rasoul, B.

Nock, Ishaya, H. 521 (Research communication)

Notani, N. K. 277 (Correspondence)

Padmanaban, G. 526 (Addendum)

Padmanabhan, D. *see* Sudhersan, C.

Pai, B. R. 191 (Historical notes)

Palanivelu, P. 169 (Review article)

Palavesam, A. *see* Muthukrishnan, J.

Panchapakesan, N. 528 (Personal news)

Pandey, V. N. *see* Kaushik, N. A.

Panigrahy, P. K. *see* Sahu, B. K.

Pant, Charu, C. 855 (Article, Quaternary period in India special issue)

Pant, R. K. 841 (Article, Quaternary period in India special issue)

Paranjpe, S. A. *see* Gore, A. P.

Paropkari, A. L. *see* Mascarenhas, A.

Parthasarathi, Ashok 569 (General article)

Pasupathy, J. 129 (Personal news)

Pathan, K. M. *see* Shaikh, Parveen D.

Patil, M. S. *see* Kaushik, N. A.

Patil, Suresh *see* Joshi, N. V.

Paul, Jaishree 262 (Research communication)

Payapilly, Denny J. *see* George, M. Thomas

Philip, Joy 527 (Book review)

Pilkhal, D. S. *see* Vijayan, P. K.

Plateau, E. *see* Uppal, P. K. (682)

Powar, K. B. 793 (Article, Quaternary period in India special issue)

Prabhudas, K. 184 (Research communication)

Pradhan, B. B. *see* Sahu, B. K.

Prakash Babu, C. *see* Mascarenhas, A.

Prout, C. K. *see* Indira, A.

Radhakrishna, B. P. 787 (Article, Quaternary period in India special issue)

Raha, Sekhar 502 (Article, Special section)

Raj, Baldev 511 (Review article)

Raj, V. Venkat *see* Vijayan, P. K.

Rajaguru, S. N. 817 (Article, Quaternary period in India special issue).

Rajasekaran, K. *see* Santhan, P.

Rajeevan, M. 244 (Research communication)

Rajendran, P. 148 (Scientific correspondence)

Rajagopalan G. *see* Rastogi, B. K.

Rajgopalan, Geeta *see* Gore, A. P.

Ramachandran, Sakkubai, P. *see* Prabhudas, K.

Ramakrishnan, N. 331 (Book review)

Ramakrishnan, S. 552 (Research news)

Ramakrishnan, T. 141, 554 (Research news)

Ramakrishnan, T. V. 690 (Book review)

Ramaseshnan, S. 24, 121, 148, 467, 545 (Editorial notes)

Ramaswami, Mani 214 (Research news)

Ramesh, N. 252 (Research communication)

Ramnarayan, K. *see* Rao, Shashidhar, N.

Rangachari, M. S. 218 (Commentary)

Ranganath, G. S. 449 (Research news)

Rangarajan 351 (Book review)

Rangaswamy, K. T. 281 (Scientific correspondence)

Rao, A. Ranga 863 (Article, Quaternary Period in India special issue)

Rao, B. U. *see* Prabhudas, K.

Rao, C. N. R. 288 (General article); 471 (Article, Special section); *see* Mashelkar, R. A. (467)

Rao, K. Nagabhushana 344 (Article, Ozone special section)

Rao, Mahendra 451 (Research news)

Rao, P. Ramachandra 708 (News)

Rao, Shashidhar N. 46 (Research communication)

Rao, U. R. *see* Chidambaram, R.

Rao, V. L. V. Prasada 280 (Scientific correspondence)

Rastogi, B. K. 933 (Article, Quaternary period in India special issue)

Reddy, B. M. 17 (Article, Anthropology special section)

Russel, D. G. *see* Sreedharan, C. R. (632)

Sagar, Ram 293 (General article)

Sahni, Ashok 893 (Article, Quaternary period in India special issue); *see* Bajpai, Sunil

Sahu, B. K. 182 (Research communication)

Sahu, R. L. *see* Mohanty, M.

Santhan, P. 321 (Research communication)

Santosh Kumari *see* Bir, S. S.

Sanzgiri, R. P. *see* Kaushik, N. A.

Sareen, B. K. 827 (Article, Quaternary period in India special issue)

Sarkar, Saumendra N. 260 (Research communication)

Sasidharan, K. 610 (Book review)

Satyan, V. *see* Kasture, S. V.

Savithri, H. S. 54 (Book review)

Selvakumar, K. S. 49 (Research communication)

Sengupta, S. *see* Sharma, D. K.

Sequeira, A. 629 (News)

Seth, P. K. 137 (Correspondence)

Shah, B. S. *see* Mohatkar, L. C.

Shah, Hasmukh 487 (Article, Special section)

Shaikh, Parveen D. 688 (Research communication)

Shankar, P. N. 80 (General article)

Shanmugam, G. 95 (Review article); 202 (Correspondence)

Shanmugasundaram, S. *see* Selvakumar, K. S.

Sharma, A. K. *see* Pant, Charu C.

Sharma, Chhaya 930 (Article, Quaternary period in India special issue)

Sharma, D. K. 325 (Research communication)

Sharma, Jayashri D. *see* Nock, Ishaya H.

Sharma, M. M. 473 (Article, Special section)

Sharma, N. K. *see* Parthasarathi, Ashok

Sharma, P. *see* Gupta, S. K.

Sharma, R. N. 208 (Opinion); 550 (Correspondence)

Sharma, Umender K. 283 (Research news)

Shashidhara Prasad, J. *see* Indira, A.

Shenoy, V. R. 575 (Review article)
 Shetye, Satish R. 32 (General article)
 Shrivastava, P. C. 915 (Article, Quaternary period in India special issue)
 Shukla, B. *see* Mehta, Y. P.
 Shyamala Devi, C. S. *see* Geetha, A.
 Siddhartha, V. 76 (Commentary); 209 (News)
 Sidhu, M. *see* Bir, S. S.
 Sikdar, S. K. *see* Sarkar, Saumendra, N.
 Singh, A. D. 908 (Article, Quaternary period in India special issue)
 Singh, B. P. 137 (Correspondence); 558 (Technical note)
 Singh, K. S. 5 (Article, Anthropology special section)
 Singh, M. 559 (Technical note); 760 (Research communication)
 Singh, Virendra 530 (Historical notes)
 Sivaprakasam, K. *see* Geetha, D.
 Smith, C. H. Llewellyn 142 (Commentary)
 Smolensky, Paul 381 (Article, Artificial intelligence special issue)
 Somayajulu, B. L. K. 926 (Article, Quaternary period in India special issue)
 Somayajulu, V. V. 579 (Review article)
 Sorkhabi, Rasoul B. 40 (Research communication)
 Sree Rangasamy, S. R. *see* Timothy, Reena
 Sreedharan, C. R. 632, 634 (Articles, Ozone special section)
 Sridhar, M. A. *see* Indira, A.
 Sridharan, R. 558 (Review article)
 Srikrishna, A. 282 (News)
 Srinivasan, M. S. *see* Singh, A. D.
 Srinivasan, Mandyam, V. 649 (General article)
 Srinivasan, R. 147 (Scientific correspondence); 691 (Book review)
 Srinivasan, S. *see* Bajpai, Sunil
 Srinivasan, V. 201 (Correspondence)
 Stump, Edmund *see* Sorkhabi, Rasoul, B.
 Subbaraman, S. 736 (Research article)
 Subbaraya, B. H. 339 (Article, Ozone special section)
 Subramanian, C. R. 52 (Book review)
 Subramanian, V. 928 (Article, Quaternary period in India special issue)

Sudhersan, C. 710 (Scientific correspondence)
 Sundaram, C. V. 210 (News)
 Swaminathan, K. V. 505 (Article, Special section)

Tandon, K. K. 524 (Research communication)
 Tandon, P. N. 626 (Correspondence)
 Tandon, S. K. *see* Mehta, Y. P.
 Thakur, A. K. *see* Mehta, Y. P.; *see* Sareen, B. K.
 Thakur, V. C. *see* Bagati, T. N.
 Thampi, P. K. 238 (Research article)
 Timothy, Reena 257 (Research communication)
 Tiwari, S. C. 626 (Correspondence)
 Tobaccowalla, A. H. 625 (Correspondence)

Udgaonkar, Jayant B. 452 (Research news)
 Uppal, P. K. 115, 682 (Research communications)

Vadjikar, R. M. 180 (Research communication)
 Vaidyanandhan, R. 804 (Article, Quaternary period in India special issue)
 Valdiya, K. S. 783 (Foreword, Quaternary period in India special issue); 873 (Article, *ibid*)
 Valiathan, Ashima *see* George, M. Thomas
 Valiathan, M. S. 280 (Scientific correspondence)
 Varma, A. K. *see* Paul, Jaishree
 Vasulu, T. S. *see* Reddy, B. M.
 Venkataraman, Arun B. 601 (Research communication)
 Venkataraman, G. 546 (Guest editorial)
 Venkataraman, L. V. 201, 204 (Correspondence)
 Verma, Pramod Kumar 146 (Scientific correspondence)
 Vijayan, P. K. 175 (Research article)
 Viraktamath, C. A. *see* Muniappan, R.
 Virdi, J. S. 118 (Book review)

Warke, C. S. 765 (Book review)
 Watve, M. G. *see* Gore, A. P.
 Wyatt, H. V. 145 (Commentary)

Yadav, M. P. *see* Uppal, P. K.

Zucker, Steven W. 407 (Article, Artificial intelligence special issue)

SUBJECT INDEX

Articles in Commentary, Editorial/Guest Editorial, News, Opinion, Research News and Technical notes; books reviewed and letters in Correspondence and Scientific Correspondence are also listed by title alphabetically under the respective category name.

Adjuvant arthritis 234 (Review article)
Allochthonous peat 684 (Research communication)
Alluvial fan 855 (Article, Quaternary period in India special issue)
α-tocopherol 318 (Research communication)
Anabas testudineus 327 (Research communication)
Anaemia 115 (Research communication)
Anomalous distribution 80 (General article)
Antarctic ozone hole 634, 636 (Articles, Ozone special section)
Antarctica 39 (Research communication); 632 (Article, Ozone special section)
Anthocyanins 575 (Review article)
Antisense RNA 285 (Research news); 715 (Review article)
Antisperm activity 688 (Research communication)
Antitumour potential 318 (Research communication)
Aphyllorchis montana Reichb 321 (Research communication)
Apiospora campitospora 50 (Research communication)
Apomixis in sorghum 306 (Review article); 315 (Response)
Apple orchards 709 (Scientific correspondence)
Appropriate research 145 (Commentary)
Arabian sea 107 (Research communication)
Aravalli fold belt 679 (Research communication)
Architectural theories 366 (Article, Artificial intelligence special issue)
Architecture of intelligence 366 (Article, Artificial intelligence special issue)
Artificial intelligence 358 (In this issue); 511 (Review article)
Artificial intelligence as science 361 (Article, Artificial intelligence special issue)
Artificial intelligence as engineering 361 (Article, Artificial intelligence special issue)
Atmospheric electricity 660 (Review article)
Atomic energy 508 (Article, Special section); 530 (Historical notes)
Autoimmunity 655 (General article)
Azadirachta indica 688 (Research communication)

B-chromosomes 322 (Research communication)
Bacillus 262 (Research communication)
Bacterial pathogenesis 118 (Book review)
Barolinic energy conversion 673 (Research article)
Bay of Bengal 32 (General article)
β-amino acid 46 (Research communication)
Bio-deterioration 736 (Research article)

Biological and computational perspective 407 (Article, Artificial intelligence special issue)
Bioreactors 715 (Review article)
Biosynthesis 575 (Review article)
Biotechnology, new trends 119 (Book review)

Book reviews
Advanced Ceramics 606
The Age of Intelligent Machines 434
The Age of Intelligent Machines: Machines that Think (Videotape review) 436
Annual Review of Entomology, Vol. 36, 1991 330
Annual Review of Entomology, Vol. 37, 1992 331
Annual Review of Nuclear and Particle Physics, Vol. 41, 1991 765
Annual Review of Public Health, Vol. 13, 1992 333
Biochemical Methods for Agricultural Sciences 54
Bose and His Statistics 691
Computing in the Electronics Industry: The Experience of Newly Industrialising Economies 52
The Essentials of Viruses, Vectors and Plant Diseases 769
The Holes in the Ozone Scare 351
Industrial Biotechnology 607
An Introduction to Peptide Chemistry 769
Manual of Clinical Methods 527
Molecular Basis of Bacterial Pathogenesis, Vol. XI 118
NCRP Report No. 113. Exposure Criteria for Medical Diagnostic Ultrasound: Criteria Based on Thermal Mechanisms 610
Nervous Systems — Principles of Design and Function 608
New Trends in Biotechnology 119
Ozone Depletion — Implications for the Tropics 351
Proceedings of Nutrition Society of India, Vol. 37 269
Superconductivity Today (An elementary introduction) 691
Why Are Things the Way They Are? 690

Bori formation 817 (Article, Quaternary period in India special issue)
Brain storming 161 (News)

Caesulia axillaris 187 (Research communication)
Carbohydrate metabolism 325 (Research communication)
Cardiac fibroblast growth 598 (Research communication)
Cardiac fibroblasts 543 (In this issue)
Catabolite repression 757 (Research communication)

Cell cycle 67 (In this issue)
 Cells 459 (General article)
 Cellulase 262 (Research communication)
 Ceramics 606 (Book review)
 Cereals 306 (Review article)
 Chalcolithic culture 148 (Scientific correspondence)
 Charminar lime plaster 760 (Research communication)
 Chedrang Fault 933 (Article, Quaternary period in India special issue)
 Chemical weathering 919 (Article, Quaternary period in India special issue)
 Chilka lake 182 (Research communication)
 Chironomids 112 (Research communication)
 Chromatin structure 212 (Research news)
 Clay mineralogy 926 (Article, Quaternary period in India special issue)
 Clustering of traits 10 (Article, Anthropology special section)
 Clusters 640 (General article)
 Clusters of galaxies 725 (Research article)
 Coastal sediments 182 (Research communication)
 Collagen synthesis 598 (Research communication)

Commentary

An encounter with genes 216
 Appropriate research: unnecessary injections in India 145
 Enrico Fermi and the nuclear age 24
 Extra-mural funding of research: results from the work of the Inter-Agency Committee 76
 Invasive alien weeds in the Western Ghats 555
 Mathematics education—some remedies 218
 Scientific research as a career: Challenges and obstacles 22
 Trade-related aspects of intellectual property rights: The case of software and India 72
 What's the use of physics? 142

Computers 28 (General article)
 Conservation of ancient paintings 703 (In this issue)
 Copyrighting software 72 (Commentary)

Correspondence

Basic science 625
 Biology research in India 204
 Doing good and great science in India 277
 Enzymatic activity of ribosomal RNA 203
 Intellectual property rights and transgenic varieties 278
 Malaise in Indian science 626
 Oops, but is your journal showing? — a rejoinder 69
 Pest-resistant crop varieties: A case for reconsideration 550
 S&T in India 137
 S&T scenario 203
 Saving Indian science 201
 Science and technology in a poor country 548

Creativity and computers 419 (Article, Artificial intelligence special issue)
 Cross salinity, sorghum 306 (Review article)
 Crystal structure 247 (Research communication)
 Cumulus heating 673 (Research article)
 Cyclonic proportions 138 (News)
 Cytoplasmic inheritance 280 (Scientific correspondence)
 Cytoskeleton 681 (Research communication)
 D-enzyme 147 (Scientific correspondence)
 Deccan Plateau 923 (Article, Quaternary period in India special issue)
 Deccan intertrappean beds 42 (Research communication)
 Deccan volcanic province 793 (Article, Quaternary period in India special issue)
 Defence 508 (Article, Special section)
 Degradation 575 (Review article)
 Dentistry 221 (General article)
 Dermato glycotics 17 (Article, Anthropology special section)
Dictyostelium discoideum 459 (General article)
 Disulphide reductase enzymes 85 (General article)
 Division of labour 10 (Article, Anthropology special section); 459 (General article)
 DNA methylation 212 (Research news)
 DNA modification 49 (Research communication)
 DNA polymerase I 102 (Research article)
 Doing science 288 (General article)
 Doping concentration 180 (Research communication)
 Doxorubicin 318 (Research communication)
 Drought 244 (Research communication)
 Dunkel draft 72 (Commentary)
 Earthquakes 837, 885, 889 (Articles, Quaternary period in India special issue)
 East coast of India 804 (Article, Quaternary period in India special issue)

Editorial/Guest editorial

The great divide — Can we bridge it? 546

Electrical conductivity structures 848 (Article, Quaternary period in India special issue)
 Electrodynamics 660 (Review article)
 Electronics industry, developing countries 52 (Book review)
Eleocharis 322 (Research communication)
 Embryogenic calli 257 (Research communication)
 Endomyocardial fibrosis 598 (Research communication)
 Enrico Fermi 24 (Commentary)
 Enzyme mixture 257 (Research communication)
 Equatorial zonal electric fields 579 (Review article)
 Equine herpes virus-1 682 (Research communication)
 Equine infectious anaemia 115 (Research communication)
 Equine leucocytes 115 (Research communication)
Escherichia coli 102 (Research article); 757 (Research communication)

Eucalyptus 150 (General article)
 Eukaryotic module 85 (Review article)
 Eulites 729 (Research article)
 European red mite 709 (Scientific correspondence)
 Eusocial wasp 601 (Research communication)
 Eusociality 215 (Research news)
 Evolutionary biology, Artificial intelligence 407
 (Article, Artificial intelligence special issue)
 Evaporation 80 (General article)
 Exsolution features 729 (Research article)
 Extra-mural funding 76 (Commentary)

 Far-red light-ethylene interaction 187 (Research communication)
 Fenvalerate 260 (Research communication)
 Fermi liquids 754 (Research communication)
 Ferrosilites 729 (Research article)
 Fingerprinting 682 (Research communication)
 Fission track age 519 (Research communication)
 Fluvial systems 817 (Article, Quaternary period in India special issue)
 Fluvio-deltaic complex 797 (Article, Quaternary period in India special issue)
 Food colours 575 (Review article)
 Foot and mouth disease virus (FMDV) 184 (Research communication)
 Foraminifera 935 (Article, Quaternary period in India special issue)
 Fractals 755 (Research communication)
 Fresco technique 736 (Research article)
 Funding of research 68 (In this issue)

 Galena 558 (Technical notes)
 Gamma amylase activity 325 (Research communication)
 γ -irradiation 757 (Research communication)
 Gandhi Memorial Lecture: Cell and society 448
 (In this issue)
 Ganges-Brahmaputra discharge 32 (General article)
 Gene deletion 640 (General article)
 Gene expression 226 (Review article)
 Gene transfer 169 (Review article)
 Genes 216 (Commentary); 640 (General article)
 Genes — Master control 623 (In this issue)
 Genetic engineering 141, 554 (Research news)
 Genetic transformation 278 (Correspondence)
 Genome project 705 (Opinion)
 Geomorphic rejuvenation 787, 873 (Articles, Quaternary period in India special issue)
 Geomorphological evolution 793 (Article, Quaternary period in India special issue)
 Global competition 52 (Book review)
 Global electric current 660 (Review article)
 Global spectral model 673 (Research article)
 Globalization 487 (Article, Special section)
 Gneissic granite 238 (Research article)
 Godavari formation 817 (Article, Quaternary period in India special issue)

Graft versus host disease 234 (Review article)
 Graphic/animation modalities 393 (Article, Artificial intelligence special issue)
 Gravitational lensing 703 (In this issue)
 Gravity and seismicity, Jaisalmer region 837 (Article, Quaternary period in India special issue)
 Growth compensation 524 (Research communication)
 Growth hormones 135 (In this issue); 169 (Review article)
Guizetia abyssinica 281 (Scientific correspondence)

Hazards of laser 221 (General article)
 Herbicide resistance 715 (Review article)
 Heterogeneous chemistry 666 (Review article)
 High mass fluxes 80 (General article)
 Himalayan metamorphism 40 (Research communication)
 Himalayan rivers, evolution 903 (Article, Quaternary period in India special issue)
 Himalayan tectonics 848 (Article, Quaternary period in India special issue)
 Histocompatibility complex 234 (Review article)

Historical notes

A gentleman of the Old School: Homi Bhabha and the development of science in India 121
 Ghani, the Indian oilpress: An ancient technology 693
 Meghnad Saha — His science and life 530
 Science in British India. Part II. Indian response 55
 The story of turbojet origins 191
 Homi Bhabha 121 (Historical notes)
 Hooghly estuary 110 (Research communication)
 Human diversity 3 (In this issue)
 Hymenoptera 215 (Research news)

Icosahedral symmetry 708 (News)
 Immunosuppression 521 (Research communication)
 India-Asia collision 40 (Research communication)
 Indian biology 205 (Opinion)
 Indian craton, Quaternary 915 (Article, Quaternary period in India special issue)
 Indian oilpress 693 (Historical notes)
 Indian rivers, sediment load 928 (Article, Quaternary period in India special issue)
 Indian science and technology, crisis 471 (Article, Special section)
 Indian soundings 634 (Article, Ozone special section)
 India's biodiversity 706 (Opinion)
 Indo-Gangetic Basin 855 (Article, Quaternary period in India special issue)
 Indo-Gangetic plains 848 (Article, Quaternary period in India special issue)
 Industrial biotechnology 607 (Book review)
 Insect vision 649 (General article)
 Insects 623 (In this issue)
 Intellectual property rights 72 (commentary); 278 (Correspondence); 502 (Article, Special section)

Intelligent machines 434 (Book review)
 Inter-Agency Committee 76 (Commentary)
 Interstitial fibrosis 598 (Research communication)
 Intra-Siwalik thrusts and plains 873 (Article, Quaternary period in India special issue)
 Invasive weeds 555 (Commentary)
 Inverted pigeonites 729 (Research article)
 Ionizing radiation 70 (News)
 Ionosphere 588 (Review article)
 Ionosphere coupling 579 (Review article)
 IUCAA 551 (News)

Japan's fifth generation computer project 391 (Article, Artificial intelligence special issue)
 Jet engines 135 (In this issue)

K/Ar hornblende ages 40 (Research communication)
 Kailasanatha temple 559 (Technical notes)
 Kanisza subjective edge 407 (Article, Artificial intelligence special issue)
 Karewas 893 (Article, Quaternary period in India special issue)
 Karyotypic analysis 322 (Research communication)
Kiefferulus barbitarsis 112 (Research communication)
 Klenow polypeptide 102 (Research article)
 Kothari, D. S. 448 (In this issue)
 Krishna-Godavari Basin 797 (Article, Quaternary period in India special issue)

Lahaul-Spiti Quaternary basins 898 (Article, Quaternary period in India special issue)
 Larval mark 524 (Research communication)
 Laser-tissue interaction 221 (General article)
 Lasers 221 (General article)
 Lateritic bauxite 919 (Article, Quaternary period in India special issue)
 Leaf senescence 226 (Review article)
Leishmania 521 (Research communication)
 Leprosy 655 (General article)
 Lesser Himalaya, topography 873 (Article, Quaternary period in India special issue)
 Lignocaine hydrochloride 247 (Research communication)
 Loess deposits 841 (Article, Quaternary period in India special issue)
 Lower crustal rocks 837 (Article, Quaternary period in India special issue)
 Lysine 681 (Research communication)

Magellanic clouds 293 (General article)
 Magnesium 279 (Scientific correspondence)
 Magnetic-polarity stratigraphy 863, 873 (Articles, Quaternary period in India special issue)
 Maize 50 (Research communication)
 Mangroves 684 (Research communication)
 Manufacturing technology, strategies 475 (Article, Special section)
 Marginal lensing 725 (Research article)

Mass functions 293 (General article)
 Materials characterization 511 (Review article)
 Mathematics education 218 (Commentary)
 Matuyama chron 863 (Article, Quaternary period in India special issue)
 Meghnad Saha 530 (Historical notes)
 Mendeleev 447 (In this issue); 449 (Research news)
 MiC 285 (Research news)
 Microbial immunity 655 (General article)
 Microfaunal affinities 893 (Article, Quaternary period in India special issue)
 Milidite 823 (Article, Quaternary period in India special issue)
 Miliolites 926 (Article, Quaternary period in India special issue)
Mimosa invisa 555 (Commentary)
 Mineralogy 926 (Article, Quaternary period in India special issue)
 Molecular breeding 278 (Correspondence)
 Monazite 182 (Research communication)
 Monochloro trinitro copper 247 (Research communication)
 Monoclonal antibodies 184 (Research communication)
 Monsoon disturbances 673 (Research article)
 Monsoon rainfall, changing pattern 935 (Article, Quaternary period in India special issue)
 Mueller-Lyer 649 (General article)
 Multipurpose trees 151 (General article)
 Multiratiative analysis 711 (General article)
 Munnar granite 238 (Research article)
 Mural paintings 736 (Research article)
 Mushroom 280 (Scientific correspondence)
 Mutation 640 (General article)
 Mycobacteria 655 (General article)
Mycobacterium tuberculosis 27 (Research news)

Narmada valley 149 (Scientific correspondence)
 Narmada-Son valleys 923 (Article, Quaternary period in India special issue)
 Natural language processing 393 (Article, Artificial intelligence special issue)
 Neogene uplift 787 (Article, Quaternary period in India special issue)
 Neotectonic activity 827 (Article, Quaternary period in India special issue)
 Neotectonic events 797 (Article, Quaternary period in India special issue)
 Neotectonics 855 (Article, Quaternary period in India special issue)
 Nerve growth factor (NGF) 451 (Research news)
 Nervous systems 608 (Book review)
 Neutralization assays 184 (Research communication)

News

Adaptive response in radiation biology 70
 DST issues revised guidelines on overhead expenses in R&D Programmes of the Central Government Departments/Agencies 79

Finance Minister's pre-budget discussion with experts of science and technology 209
Indo-French seminar on history of development of science in India and France (Covelong, Madras, October 20-23, 1992) 210
IUCAA dedicated 551
A Nigerian and a Mexican share the 1992 Kalinga Award 550
Report on the brainstorming session in the area of tree biology 161
A report on the 35th DAE symposium on solid state physics 629
Report on the discussion meeting on icosahedral symmetry in materials 708
Wing tip vortices of cyclonic proportions 138

Niggli variation 238 (Research article)
Nilgiri biosphere reserve 706 (Opinion)
NMR spectroscopy 452 (Research news)
Nondestructive evaluation (NDE) 511 (Review article)
Northern Indian ocean 908 (Article, Quaternary period in India special issue)
NRDC 543 (In this issue); 569 (General article)
Nuclear age 24 (Commentary)
Nuclear physics 530 (Historical notes)
Nucleotide-binding domains 85 (Review article)
Occupational diversity 10 (Article, Anthropology special section)
Oncogenes 95 (Review article)

Opinion

Indian biology research at crossroads — Another perspective 205
The Nilgiri Biosphere Reserve and its role in conserving India's biodiversity 706
Save science or scientists' interest? And why? 454
A watershed in termite control 208
What ails Indian science 628
What should India be doing in the human genome? 705

Optical resonator 221 (General article)
Organogenesis 604 (Research communication)
Ornamental trees 151 (General article)
Ornithoid eggshells 42 (Research communication)
Oscillatoria 42 (Research communication)
Ozone 335, 339, 344 (Articles, Ozone special section)
Ozone and climatic trends 335 (Article, Ozone special section)
Ozone chemistry 666 (Review article)
Ozone depletion 351 (Book review); 666 (Review article)
Ozone scare 348 (Book review)

Palaeoclimate 823 (Article, Quaternary period in India special issue)

Palaeolithic 148 (Scientific correspondence)
Palaeoseismicity studies, Meghalaya 933 (Article, Quaternary period in India special issue)
Palaeovegetation 930 (Article, Quaternary period in India special issue)
Palynostratigraphy 930 (Article, Quaternary period in India special issue)
Panonychus ulmi 709 (Scientific correspondence)
Paradigms and serendipity 162 (General article)
Patenting 569 (General article)
People of India 5, 10 (Articles, Anthropology special section)
Peptide chemistry 769 (Book review)
Peptides 46 (Research communication)

Personal/Academy/Society news

Fathers of the jet age receive Charles Stark Draper Prize 195
A. R. Gopal-Ayengar (An obituary) 267
Indian Academy of Sciences elects new fellows — 1992 771
INSA elects new fellows 615
An outstanding electrochemist (An obituary of S. Sathyanarayana) 268
A renowned cosmic-ray physicist (An obituary of Bernard Peters) 612
Robert Eugene Marshak (An obituary) 129
Stevens-Shapiro Fellowship of UK to Bibhas Kar 131
A superb teacher-learner (An obituary of D. S. Kothari) 528
The Walter J. Johnson Prize for John Kuriyan 131

Philosophical puzzles 419 (Article, Artificial intelligence special issue)
Philosophy of science 626 (Correspondence)
Phosphorylated tyrosines 85 (General article)
Phyllody disease 281 (Scientific correspondence)
Physical anthropology 17 (Article, Anthropology special section)
Physics, emerging trends 566 (General article)
Planetary atmospheres 301 (Review article)
Planktonic foraminifera 908 (Article, Quaternary period in India special issue)
Plant genetic engineering 715 (Review article)
Plant regeneration 199 (In this issue)
Plant sciences 161 (News)
Plasmas 301 (Review article)
Plasmid biology 283 (Research news)
Pleurotus djamor 280 (Scientific correspondence)
Polar cusp variations 579 (Review article)
Polar horticulture 39 (Research communication)
Pollen fertility 141 (Research news)
Polymers 552 (Research news); 755 (Research communication)
Population 10 (Article, Anthropology special section)
Population genetics 17 (Article, Anthropology special section)

Pore size 180 (Research communication)
 Porins 285 (Research news)
 Porous silicon 180 (Research article)
 Post-liberalization economy — some issues and challenges 475 (Article, Special section)
 Pressurized heavy water reactors 175 (Research article)
 Programs and scientific discovery 419 (Article, Artificial intelligence special issue)
 Protein 452 (Research news)
 Protein architecture 67 (In this issue)
 Protein structures 85 (Review article)
 Proteolytic fragment 102 (Research article)
Publications received 271

Quasars 301 (Review article)
 Quaternary aridity 841 (Article, Quaternary period in India special issue)
 Quaternary climatic changes 817, 908 (Articles, Quaternary period in India special issue)
 Quaternary climatic changes 908 (Article, Quaternary period in India special issue)
 Quaternary deposits 903 (Article, Quaternary period in India special issue)
 Quaternary sediments 823, 855 (Articles, Quaternary period in India special issue)
 Quaternary tectonics 921 (Article, Quaternary period in India special issue)
 Quaternary volcanic activity 923 (Article, Quaternary period in India special issue)

R&D Institutions 490 (Article, Special section)
 R&D Programmes, DST guidelines 79 (News)
 Radiation 39 (Research communication)
 Radiation hormesis 70 (News)
 Raman effect in skies 275 (In this issue)
 Raman scattering 301 (Review article)
 Ray tracing 252 (Research communication)
 Remote sensing 146 (Scientific correspondence)

Research news
 And now ... eusocial thrips! 215
 Aspersing aspirin: Salicylate-inducible antibiotic resistance 285
 Beyond Mendeleev 449
 Conducting polymers — Newer avenues of application 552
 Folding in an unfolded protein 452
 How to reap what you did not sow 141
 How to reap what you did not sow — II 554
 Inheritance of chromatin structure 212
 Insights into plasmid biology 283
 Intermittency in tokamak edge turbulence 140
 Old wine in new bottle 27
 On the right *trk* 451
 Rabid roles in vesicle fusion 214

Restriction endonuclease 682 (Research communication)
 Reynolds numbers 28 (General article)
 Ribosomal RNA 203 (Correspondence)
Ropalidia marginata 601 (Research communication)

S&T funding 626 (Correspondence)
 S&T in India 137, 201, 277, 545, 546, 548, 625, 626 (Correspondence); 145 (Commentary); 162, 288 (General articles); 209 (News); 467 (Guest editorial); 505 (Article, Special section); 628 (Opinion)
 S&T in post-liberalization era 505 (Article, Special section)
 Sabarmati river system 827 (Article, Quaternary period in India special issue)
Saccharum officinarum 604 (Research communication)
 Saha, Meghnad 447 (In this issue)
 Sahyadri uplands 793 (Article, Quaternary period in India special issue)
 Satluj basin 903 (Article, Quaternary period in India special issue)
 Science and aesthetics 288 (General article)
 Science funding 142 (Commentary)
 Science in British India 55 (Historical notes)
 Science policy 705 (Opinion)

Scientific correspondence
 Cytoplasmic inheritance of tolerance to insect pests in rice 280
 An epidemic outbreak of *Panonychus ulmi* (Koch) (Acari: Tetranychidae) in apple orchards of Himachal Pradesh, India 709
In vitro propagation of *Scilla hyacinthina* (Roth) Macbr 710
 Magnesium level 279
 Natural occurrence of phyllody disease in niger (*Guizetia abyssinica*) in Karnataka 281
Pleurotus djamor — A new edible mushroom 280

Scientific philosophy 162 (General article)
 Scientific publications 69 (Correspondence)
 Scientific research, challenges 22 (Commentary)
 Scientific research, obstacles 22 (Commentary)
 Scientific visualization 252 (Research communication)
Scilla hyacinthina 710 (Scientific correspondence)
 Sea surface temperature 107 (Research communication)
 Secco technique 736 (Research article)
 Sedimentation 898, 915 (Articles, Quaternary period in India special issue)
 Seismic gaps 885 (Article, Quaternary period in India special issue)
 SEM carp scales 524 (Research communication)
 Semantic and pragmatic aspects 393 (Article, Artificial intelligence special issue)
 Separability hypothesis 366 (Article, Artificial intelligence special issue)

Sex discrimination 711 (General article)
Siam weed 555 (Commentary)
Signal and image processing 511 (Review article)
Signal transduction 95 (Review article)
Siwalik subgroup 519 (Research communication)
Siwaliks 893 (Article, Quaternary period in India special issue)
Slope-deviator alignment 827 (Article, Quaternary period in India special issue)
Snow cover 244 (Research communication)
Sodium channels 260 (Research communication)
Solid state physics 629 (News)
Sorghum 315 (Response)
Space 508 (Article, Special section)
Spectroscopy and exotic nuclei 765 (Book review)
Split spectrum processing 511 (Review article)
Standard model physics 765 (Book review)
Star clusters 275 (In this issue); 293 (General article)
Stegodon namadicus tusks 149 (Scientific correspondence)
Stratigraphy 804 (Article, Quaternary period in India special issue)
Stratospheric aerosols 666 (Review article)
Sub-symbolic paradigm 381 (Article, Artificial intelligence special issue)
Sugarcane 604 (Research communication)
Superconductivity 690 (Book review)
Suppressor genes 95 (Review article)
Surface ozone measurements 632 (Article, Ozone special section)
Suspension culture 257 (Research communication)
Symbolic computation 381 (Article, Artificial intelligence special issue)

T-cell receptor 234 (Review article)

Technical notes

Effect of ultrasonication on the flotability of galena 558
Studies on weathering of Kailasanatha temple, Kancheepuram 559

Technology challenges, post-liberalization era 473 (Article, Special section)
Technology policy 494 (Article, Special section)
Tempera technique 736 (Research article)
Termite control 208 (Opinion)
Tertiary period 919 (Article, Quaternary period in India special issue)
Thar desert 841 (Article, Quaternary period in India special issue)
Theory of language 381 (Article, Artificial intelligence special issue)
Thermal anomalies 244 (Research communication)
Thermosphere coupling 588 (Review article)
Thermosyphon cooling 175 (Research article)
Thyroid 275 (In this issue)

Thyroid hormone 327 (Research communication)
Thysanoptera 215 (Research news)
Tiger census 711 (General article)
Tokamak 140 (Research news)
Trans-Himalayan conductor 848 (Article, Quaternary period in India special issue)
Transgenic animals 169 (Review article)
Transgenic cultivars 715 (Review article)
Tree biology 151 (General article); 161 (News)
Trees and environment 151 (General article)
Tropical atmosphere 339 (Article, Ozone special section)
Tropical weathering 921 (Article, Quaternary period in India special issue)
Tuberculosis 27 (Research news); 655 (General article)
Tumour 95 (Review article)
Turbojet origins 191 (Historical notes)
Turbulence 28 (General article)

Ultramafic breccia 679 (Research communication)
Ultrasonication 558 (Commentary)
Union Budget 1993-94, Extracts 287
Upper Bhima formation 817 (Article, Quaternary period in India special issue)
Upper Pliocene-Quaternary vertebrate 893 (Article, Quaternary period in India special issue)
Upper Siwalik, lithology 863 (Article, Quaternary period in India special issue)
Upper atmosphere 632 (Article, Ozone special section)
Upper mantle material 837 (Article, Quaternary period in India special issue)
Upper tropospheric circulation 244 (Research communication)

Value of physics 142 (Commentary)
Value of science 142 (Commentary)
Vapour 80 (General article)
Vasoactive intestinal peptide (VIP) 521 (Research communication)
Vesicle fusion 214 (Research news)
Visual illusion 623 (In this issue); 649 (General article)
Visualizing 3D 199 (In this issue)
Volcanic breccia 923 (Article, Quaternary period in India special issue)
Volume rendering 252 (Research communication)
von Ohain 191 (Historical notes)

Weathering 559 (Technical notes)
West coast of India 684 (Research communication)
Whittle, W. U. 191 (Historical notes)

Xylanase 262 (Research communication)

Zircon 519 (Research communication)
Zooplankton, metal levels 110 (Research communication)



